Abstract of the Disclosure

[00026] The invention is directed to an aircraft spray booth providing for effective removal of particulate matter, overspray and volatile organic compounds from the spray booth area without premature and uneven clogging of the filtration system. The present invention is designed to create an accelerated airflow within the plenum of the spray booth to prevent or minimize stratification of the air and reduce particulate matter fallout. The airflow through the booth is increased by the reduction of the spray booth and filter area to approximately 1/3 of the original booth width. The decrease in the cross sectional area of the spray booth increases the overall speed of the airflow and decrease the volume of air exchanged through the booth. The spray booth is tapered at the reduction area to cause acceleration of the air at the sidewalls. The acceleration of air at the sidewalls causes a purging of air along the sidewalls and prevents paint and other particulate matter from adhering to the sidewalls. The reduction in the spray booth allows lighting can be placed closer to the painted surface in the tail and fuselage section of the aircraft to aid in the accuracy of the painting process.